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RECORD OF ORAL HEARING

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte STEVEN J. HARRIS, MICHAEL C. HEBBRON,
and IAN M. STURLAND

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Appeal 2009-003895
Application 10/529,227

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Oral Hearing Held: Thursday, August 13, 2009

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Before CATHERINE Q. TIMM, MICHAEL P. COLAIANNI, and
JEFFREY B. ROBERTSON, Administrative Patent Judges

ON BEHALF OF THE APPELLANTS:

STANLEY SPOONER, ESQ.
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The above-entitled matter came on for hearing on August 13, 2009, commencing at 10:02 a.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, 9th Floor, Hearing Room A, Alexandria, Virginia, before Jon Hundley, Notary Public.

THE CLERK: Calendar No. 50, Mr. Spooner.

JUDGE TIMM: Good morning, Mr. Spooner.

MR. SPOONER: Good morning.

JUDGE TIMM: If you have a business card for our court reporter?

MR. SPOONER: I checked and I don't. I'm all out.

JUDGE TIMM: Oh.

(Discussion was held off the record.)

MR. SPOONER: Excuse me? Okay. Great.

As you've indicated, you already know who I am. I'm representing the assignee of record, BAE Systems, Ltd.

The problem that we're dealing with in this patent application is the corrosion of metallic materials. Here the particular application is in an aircraft environment and in particular aircraft in the naval environment.

So you have salt air, moisture. That sort of thing.

The background of the invention discusses two different types: The galvanic, where you're actually measuring the medium that causes the corrosion, with the assumption that the more corrosive the medium is, the more corrosion you're going to have.

The other one is the type in which they actually lay down a pattern of metal and measure the corrosion that occurs on that metal. And if

the corrosion occurs on a strip of metal, it increases the resistance, because the metal material available to carry current is reduced.

One of the problems and one of the cited references to the Kim reference is actually discussed in the background of the invention.

And the problem with that reference is that it has a number of parallel stripes that go from terminal to terminal, that carry the current.

But because you have a number of them, the current draw of that device is fairly high. As you probably know, the more paths of conductivity you have, the less overall resistance you have to current flow, so you have a greater current flow, and thus you need a bigger battery, or you need to recharge it more often, or whatever.

Applicant came up with a modification to the Kim device that reduces the current flow and still provides that desired sensitivity. And what they've done is they've used serpentine paths, or the so-called inverted U-shaped bends, in each one of this plurality of paths, so you can increase the resistance of something by increasing the length of it.

And so they packed that length in this serpentine path. But they've increased the resistance of each one of the things, so that the overall resistance is still greater -- even though they're in parallel -- the overall resistance is still greater than something like the Kim reference or even a single serpentine path device.

So the claim says you've got to have a microsensor, it's got to be comprised of two common terminals -- at least two -- a plurality of corrosive tracts.

And each of the tracts has four characteristics. It must be electrically connected to, as I said, at least two terminals. It's got to be exposed to the corrosive media. It's got to comprise a pattern-conductive thin film following a path, and that path has to be a plurality of mutually inverted, generally U-shaped bends.

All right. So these are all the requirements. In an obviousness rejection, it's important to remember that the KSR case of a couple years ago really defined what we have to look for, and what the examiner's obligation is in making a prima facie case of obviousness.

As I've mentioned in the Reply Brief, there is an analysis that the examiner must do, and it's got to be an explicit analysis.

I did not quote, perhaps the best part of the decision, which describes what that analysis is.

And the Court lists a number of factors on page 1396 of its decision that are necessary for a court to look at, a reviewing court to look at.

And it says basically that these factors are necessary to look at, and these factors are all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.

The Court then goes on say, "To facilitate review, this analysis should be made explicit." I quoted the latter part, but I didn't quote the first part. So you should be aware of that.

The Deputy Commissioner for Patents, Margaret Focarino, shortly after that decision came out, went ahead and said in a memo, May 3

of '07, "It remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed."

So that's the test. The examiner can't just come up with a shopping list of the elements, and cite a bunch of references that shows those elements. He has to also provide some specific analysis of reasoning as to why those elements would be combined.

And it has to be set out somewhere, so that a reviewing court, such as yourself, can look at it and see if this is reasonable or not.

In this instance, we think the Examiner has failed. He's failed both to identify what elements he's taking from the various references, and he's failed to provide this required analysis.

Now technically I would say yeah, he's failed in those and we've listed that in the Reply Brief. But practically speaking, what the Examiner is doing, he's saying, "We've got an arrangement shown in the Kim reference, plurality of connections, and we've got a disposition of a single connection in the Ansuini reference, this serpentine path.

"And therefore it would be obvious to combine the two and have a bunch of serpentine paths modifying the Kim reference."

I think that's where he's going. But technically he hasn't specifically identified each one of the elements that he's taking from the references.

And so we've treated that in the Reply Brief as well, and I don't think we need to belabor that point.

JUDGE TIMM: Did you make that argument in the principal Brief?

MR. SPOONER: Yes, ma'am. Yeah, that's in the principal Brief on page, it's Argument A and C -- A with respect to the Kim reference and C with respect to the Ansuini reference.

JUDGE TIMM: Mm-hmm.

MR. SPOONER: And I apologize for the organization. I jumped around a little bit. Since I was talking about the Kim reference, Argument B in the Appeal Brief is with respect to the Kim reference teaching away from the claimed invention.

And Argument D in the Appeal Brief is the Ansuini reference, teaching away.

And then in Item E, I actually talked about, number one, the Examiner hasn't shown the elements, number two, the Examiner hasn't provided any analysis, so he hasn't set up a prima facie case.

And then element 3, E(3), the both references actually teach away from the claimed combination of elements.

So the interesting thing here is, though, is the second requirement, the second-tier requirement for a prima facia case of obviousness, this requirement of some analysis of reasons for picking and choosing and then combining in the manner of the claims.

And the only thing I can find in the third non-final rejection and the Examiner's Answer is he's saying that the Ansuini case teaches that you use the serpentine nature of the section for space-saving purposes.

And I think that's what he's going to argue, or what he does argue is the motivation. But in actuality, it's clearly obvious to one of ordinary skill on the art that a serpentine path is not the minimal path. The minimal path is a straight line.

He doesn't say anything in there about using a serpentine path to increase the resistance of a line. And that's what the invention does.

It increases the resistance of each one of the lines in the Kim reference, so that when you combine those lines in parallel, you still have a higher total resistance between the two terminals. And it's that higher total resistance that decreases the amount of current draw. And that's the advantage of the invention.

So even if Ansuini did teach using a serpentine for space-saving purposes, he doesn't recognize the benefit that you can have it much more resistive, but in parallel still have a practical sensor.

So because there's no recognition of that in Ansuini, and because inherently the shortest distance between two points is a straight line, not the serpentine thing, Ansuini doesn't really teach space-savings.

What the Examiner probably meant to say was Ansuini teaches that you can put a path in a small square rather than a long skinny package. The area is still the same. The area of the path is still exactly the same, whether you serpentine it or not.

All we're doing is we're using that to make sure that we can have a much higher resistance between the two points along each one of the paths, and because they're in parallel, that resistance is still going to be a little less.

So we think the Examiner has just simply failed to provide any analysis that the Board and the reviewing courts can look to, to understand why he has picked and chosen various elements from the two references.

One of the references was clearly discussed in the background. It was well known to the Inventor when they came up with this improvement.

All right. So we don't think he's made his prima facia case because he hasn't technically shown where the bits are that he's picking and choosing; and two, he hasn't come up with the reasons for combining -- picking and choosing and combining.

But even if he had made a prima facia case, if one of the reference teaches away from the claimed combination, that rebuts the prima facia case.

Here, it's our contention -- and this is E(3) in the Appeal Brief -- it's our contention that each of the references teaches away, the Kim reference because it says: Yeah, use a direct line, use the straight line connection between these things. Just use a plurality of them.

So it teaches the plurality, but it teaches a straight line. The Ansuini reference teaches: Oh, you don't need to worry about a bunch of lines; all you need is this single line. You have one single line that's exposed, another one that's covered up, and so it uses that comparison to determine corrosion over a period of time.

But you only needed that one single line, but make it serpentine for "space-saving" purposes.

Each one by itself would tend to lead one of ordinary skill in the art away from our claimed combination. The fact that both of them lead people away I think is a fair rebuttal of any prima facia case, even if it's made.

JUDGE TIMM: Is there anything in Kim that says that the lines need to be straight?

MR. SPOONER: That's the only thing Kim teaches. I found no teaching of anything else in Kim.

JUDGE TIMM: Does it explicitly say "I use straight lines"? Or is it just what is depicted in the figure?

MR. SPOONER: That's all it shows. That's all it shows.

And the Examiner's contention that Kim doesn't preclude curved lines or serpentine lines or that Ansuini doesn't preclude the use of a plurality of things, that's simply not the standard of teaching away. In re Fine, In re Rouffet, all the related cases say that if the reference suggests, it's what the reference suggests or teaches, that is the teaching away.

And here the only thing that Kim teaches is straight lines. The only thing that Ansuini teaches is a single serpentine. And it teaches it for some other reason, other than what we're using it for.

So, in summary, we don't think he's set out the first prong of the prima facia of obviousness. We don't think he's set out the second one, i.e., the reasons or the analysis.

And even if he's made the two of them, he hasn't rebutted. He offers no real rebuttal to this, other than to say that because the references don't preclude it, because the references say, "You can't possibly used

curved lines" or "You can't possibly use the plurality lines," he's saying there is no teaching away.

And that's just not the legal standard.

Questions?

JUDGE TIMM: Any questions?

JUDGE COLAIANNI: No questions.

JUDGE TIMM: Any questions?

JUDGE ROBERTSON: No.

MR. SPOONER: Great.

Whereupon, at 10:17, the proceedings were concluded.